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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/898,860

DATE: 12/04/2001  
 TIME: 10:43:21

Input Set : N:\Crf3\RULE60\09898860.raw  
 Output Set: N:\CRF3\12042001\I898860.raw

## SEQUENCE LISTING

ENTERED

3 (1) GENERAL INFORMATION:  
 5 (i) APPLICANT: KAWAKAMI, YUTAKA; ROSENBERG,  
 6 STEVEN A.  
 8 (ii) TITLE OF INVENTION: MELANOMA ANTIGENS AND  
 9 THEIR USE IN DIAGNOSTIC AND THERAPEUTIC  
 10 METHODS  
 12 (iii) NUMBER OF SEQUENCES: 126  
 14 (iv) CORRESPONDENCE ADDRESS:  
 15 (A) ADDRESSEE: MORGAN & FINNEGAN, L.L.P.  
 16 (B) STREET: 345 PARK AVENUE  
 17 (C) CITY: NEW YORK  
 18 (D) STATE: NEW YORK  
 19 (E) COUNTRY: USA  
 20 (F) ZIP: 10154  
 22 (v) COMPUTER READABLE FORM:  
 23 (A) MEDIUM TYPE: FLOPPY DISK  
 24 (B) COMPUTER: IBM PC COMPATIBLE  
 25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
 26 (D) SOFTWARE: ASCII  
 28 (vi) CURRENT APPLICATION DATA:  
 C--> 29 (A) APPLICATION NUMBER: US/09/898,860  
 C--> 30 (B) FILING DATE: 03-Jul-2001  
 32 (vii) PRIOR APPLICATION DATA:  
 33 (A) APPLICATION NUMBER: US/09/267,439  
 34 (B) FILING DATE:  
 36 (A) APPLICATION NUMBER: US/08/417,174  
 37 (B) FILING DATE: 05-APR-1995  
 39 (A) APPLICATION NUMBER: US/08/231,565  
 40 (B) FILING DATE: 22-APR-1994  
 42 (viii) ATTORNEY/AGENT INFORMATION:  
 43 (A) NAME: CAROL M. GRUPPI  
 44 (B) REGISTRATION NUMBER: 37,341  
 45 (C) REFERENCE/DOCKET NUMBER: 2026-4124US1  
 47 (ix) TELECOMMUNICATION INFORMATION:  
 48 (A) TELEPHONE: (212) 758-4800  
 49 (B) TELEFAX: (212) 751-6849  
 50 (C) TELEX: 421792  
 52 (2) INFORMATION FOR SEQ ID NO: 1:  
 54 (i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 1559  
 56 (B) TYPE: NUCLEOTIDE  
 57 (C) STRANDEDNESS: DOUBLE  
 58 (D) TOPOLOGY: UNKNOWN  
 65 (ii) MOLECULE TYPE: cDNA  
 67 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
 69 AGCAGACAGA GGACTCTCAT TAAGGAAGGT GTCCTGTGCC

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71	CTGACCCTAC	AAGATGCCAA	GAGAAGATGC	TCACTTCATC	80
73	TATGGTTACC	CCAAGAAGGG	GCACGGCCAC	TCTTACACCA	120
75	CGGCTGAAGA	GGCGCTGGG	ATCGGCATCC	TGACAGTGAT	160
77	CCTGGGAGTC	TTACTGCTCA	TCGGCTGTTG	GTATTGTAGA	200
79	AGACGAAATG	GATACAGAGC	CTTGATGGAT	AAAAGTCTTC	240
81	ATGTTGGCAC	TCAATGTGCC	TTAACAAAGAA	GATGCCACAA	280
83	AGAAGGGTTT	GATCATCGGG	ACAGCAAAGT	GTCTCTTCAA	320
85	GAGAAAAACT	GTGAACCTGT	GGTTCCCAAT	GCTCCACCTG	360
87	CTTATGAGAA	ACTCTCTGCA	GAACAGTCAC	CACCACCTTA	400
89	TTCACCTTAA	GAGCCAGCGA	GACACCTGAG	ACATGCTGAA	440
91	ATTATTTCTC	TCACACTTTT	GCTTGAATT	AATACAGACA	480
93	TCTAATGTT	TCCTTGGAA	TGGTAGGA	AAAATGCAAG	520
95	CCATCTCTAA	TAATAAGTC	GTGTTAAAT	TTTAGTAGGT	560
97	CCGCTAGCAG	TACTAACAT	GTGAGGAAAT	GATGAGAAAT	600
99	ATTAATTGG	GAAAACCTCA	TCAATAAATG	TTGCAATGCA	640
101	TGATACTATC	TGTGCCAGAG	GTAATGTTAG	TAAATCCATG	680
103	GTGTTATTTT	CTGAGAGACA	GAATTCAAGT	GGGTATTCTG	720
105	GGGCCATCCA	ATTTCTCTT	ACTTGAAATT	TGGCTAATAA	760
107	CAAACATAGTC	AGGTTTCGA	ACCTTGACCG	ACATGAAC	800
109	TACACAGAAAT	TGTTCCAGTA	CTATGGAGTG	CTCACAAAGG	840
111	ATACTTTAC	AGGTTAACAC	AAAGGGTTGA	CTGGCCTATT	880
113	TATCTGATCA	AGAACATGTC	AGCAATGTCT	CTTTGTGCTC	920
115	AAAATTCTA	TTATACTACA	ATAATATATT	GTAAAGATCC	960
117	TATAGCTCTT	TTTTTTGAG	ATGGAGTTTC	GCTTTGTTG	1000
124	CCCAGGCTGG	AGTGAATGG	CGCGATCTG	GCTCACCA	1040
126	ACCTCCGCCT	CCCAGGTTCA	AGCAATTCTC	CTGCCTTAGC	1080
128	CTCCCTGAGTA	GCTGGGATTA	CAGGCGTGC	CCACTATGCC	1120
130	TGACTAATT	TGTAGTTTA	GTAGAGACGG	GGTTCTCCA	1160
132	TGTTGGTCAG	GCTGGCTCA	AACTCCTGAC	CTCAGGTGAT	1200
134	CTGCCCGCCT	CAGCCTCCC	AAAGTGC	ATTACAGGC	1240
136	TGAGCCACCA	CGCCTGGCTG	GATCCTATAT	CTTAGGTAAG	1280
138	ACATATAACG	CAGTCTAATT	ACATTCACT	TCAAGGCTCA	1320
140	ATGCTATTCT	AACTAACG	AAAGTATTTC	TACTAACCA	1360
142	GAAATTGGTA	GAAGGATTAA	ATAAGTAAA	AGCTACTATG	1400
144	TAATGCTTA	GTGCTGATGC	CTGTGTACTG	CCTTAAATGT	1440
146	ACCTATGGCA	ATTTAGCTCT	CTTGGGTTCC	CAAATCCCTC	1480
148	TCACAAGAAT	GTGCAGAAGA	AATCATAAAG	GATCAGAGAT	1520
150	TCTGAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	1559

153 (2) INFORMATION FOR SEQ ID NO: 2:

155 (i) SEQUENCE CHARACTERISTICS:

156 (A) LENGTH: 118

157 (B) TYPE: amino acid

158 (C) STRANDEDNESS: Unknown

159 (D) TOPOLOGY: Unknown

161 (ii) MOLECULE TYPE: Protein

163 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

165 Met Pro Arg Glu Asp Ala His Phe Ile Tyr Gly Tyr Pro Lys

166 1 5 10

167 Lys Gly His Gly His Ser Tyr Thr Thr Ala Glu Glu Ala Ala

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168 15 20 25  
169 Gly Ile Gly Ile Leu Thr Val Ile Leu Gly Val Leu Leu  
170 30 35 40  
171 Ile Gly Cys Trp Tyr Cys Arg Arg Arg Asn Gly Tyr Arg Ala  
172 45 50 55  
173 Leu Met Asp Lys Ser Leu His Val Gly Thr Gln Cys Ala Leu  
174 60 65 70  
175 Thr Arg Arg Cys Pro Gln Glu Gly Phe Asp His Arg Asp Ser  
176 75 80  
183 Lys Val Ser Leu Gln Glu Lys Asn Cys Glu Pro Val Val Pro  
184 85 90 95  
185 Asn Ala Pro Pro Ala Tyr Glu Lys Leu Ser Ala Glu Gln Ser  
186 100 105 110  
187 Pro Pro Pro Tyr Ser Pro  
188 115

191 (2) INFORMATION FOR SEQ ID NO: 3:

193 (i) SEQUENCE CHARACTERISTICS:  
194 (A) LENGTH: 9  
195 (B) TYPE: amino acid  
196 (C) STRANDEDNESS: Unknown  
197 (D) TOPOLOGY: Unknown

199 (ii) MOLECULE TYPE: Peptide  
201 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

204 Thr Thr Ala Glu Glu Ala Ala Gly Ile  
205 1 5

208 (2) INFORMATION FOR SEQ ID NO: 4:

210 (i) SEQUENCE CHARACTERISTICS:  
211 (A) LENGTH: 9  
212 (B) TYPE: amino acid  
213 (C) STRANDEDNESS: Unknown  
214 (D) TOPOLOGY: Unknown

216 (ii) MOLECULE TYPE: Peptide  
218 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

221 Ala Ala Gly Ile Gly Ile Leu Thr Val

222 1 5

225 (2) INFORMATION FOR SEQ ID NO: 5:

227 (i) SEQUENCE CHARACTERISTICS:  
228 (A) LENGTH: 9  
229 (B) TYPE: amino acid  
230 (C) STRANDEDNESS: Unknown  
231 (D) TOPOLOGY: Unknown

233 (ii) MOLECULE TYPE: Peptide  
235 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

242 Gly Ile Gly Ile Leu Thr Val Ile Leu

243 1 5

246 (2) INFORMATION FOR SEQ ID NO: 6:

248 (i) SEQUENCE CHARACTERISTICS:  
249 (A) LENGTH: 9  
250 (B) TYPE: amino acid

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251 (C) STRANDEDNESS: Unknown  
252 (D) TOPOLOGY: Unknown  
254 (ii) MOLECULE TYPE: Peptide  
256 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
259 Gly Ile Leu Thr Val Ile Leu Gly Val  
260 1 5  
263 (2) INFORMATION FOR SEQ ID NO: 7:  
265 (i) SEQUENCE CHARACTERISTICS:  
266 (A) LENGTH: 9  
267 (B) TYPE: amino acid  
268 (C) STRANDEDNESS: Unknown  
269 (D) TOPOLOGY: Unknown  
271 (ii) MOLECULE TYPE: Peptide  
273 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:  
276 Ile Leu Thr Val Ile Leu Gly Val Leu  
277 1 5  
280 (2) INFORMATION FOR SEQ ID NO: 8:  
282 (i) SEQUENCE CHARACTERISTICS:  
283 (A) LENGTH: 9  
284 (B) TYPE: amino acid  
285 (C) STRANDEDNESS: Unknown  
286 (D) TOPOLOGY: Unknown  
288 (ii) MOLECULE TYPE: Peptide  
290 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:  
292 Leu Thr Val Ile Leu Gly Val Leu Leu  
293 1 5  
301 (2) INFORMATION FOR SEQ ID NO: 9:  
303 (i) SEQUENCE CHARACTERISTICS:  
304 (A) LENGTH: 9  
305 (B) TYPE: amino acid  
306 (C) STRANDEDNESS: Unknown  
307 (D) TOPOLOGY: Unknown  
309 (ii) MOLECULE TYPE: Peptide  
311 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:  
313 Thr Val Ile Leu Gly Val Leu Leu Leu  
314 1 5  
317 (2) INFORMATION FOR SEQ ID NO: 10:  
319 (i) SEQUENCE CHARACTERISTICS:  
320 (A) LENGTH: 9  
321 (B) TYPE: amino acid  
322 (C) STRANDEDNESS: Unknown  
323 (D) TOPOLOGY: Unknown  
325 (ii) MOLECULE TYPE: Peptide  
327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:  
330 Val Ile Leu Gly Val Leu Leu Ile  
331 1 5  
334 (2) INFORMATION FOR SEQ ID NO: 11:  
336 (i) SEQUENCE CHARACTERISTICS:  
337 (A) LENGTH: 9

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338                 (B) TYPE: amino acid  
339                 (C) STRANDEDNESS: Unknown  
340                 (D) TOPOLOGY: Unknown  
342         (ii) MOLECULE TYPE: Peptide  
344         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:  
347 Ala Leu Met Asp Lys Ser Leu His Val  
348         1                 5  
351 (2) INFORMATION FOR SEQ ID NO: 12:  
353         (i) SEQUENCE CHARACTERISTICS:  
360                 (A) LENGTH: 9  
361                 (B) TYPE: amino acid  
362                 (C) STRANDEDNESS: Unknown  
363                 (D) TOPOLOGY: Unknown  
365         (ii) MOLECULE TYPE: Peptide  
367         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:  
370 Ser Leu His Val Gly Thr Gln Cys Ala  
371         1                 5  
374 (2) INFORMATION FOR SEQ ID NO: 13:  
376         (i) SEQUENCE CHARACTERISTICS:  
377                 (A) LENGTH: 9  
378                 (B) TYPE: amino acid  
379                 (C) STRANDEDNESS: Unknown  
380                 (D) TOPOLOGY: Unknown  
382         (ii) MOLECULE TYPE: Peptide  
384         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:  
387 Pro Val Val Pro Asn Ala Pro Pro Ala  
388         1                 5  
391 (2) INFORMATION FOR SEQ ID NO: 14:  
393         (i) SEQUENCE CHARACTERISTICS:  
394                 (A) LENGTH: 9  
395                 (B) TYPE: amino acid  
396                 (C) STRANDEDNESS: Unknown  
397                 (D) TOPOLOGY: Unknown  
398         (ii) MOLECULE TYPE: Peptide  
400         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:  
403 Asn Ala Pro Pro Ala Tyr Glu Lys Leu  
404         1                 5  
406 (2) INFORMATION FOR SEQ ID NO: 15:  
408         (i) SEQUENCE CHARACTERISTICS:  
409                 (A) LENGTH: 10  
410                 (B) TYPE: amino acid  
411                 (C) STRANDEDNESS: Unknown  
412                 (D) TOPOLOGY: Unknown  
419         (ii) MOLECULE TYPE: Peptide  
421         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:  
424 Tyr Thr Thr Ala Glu Glu Ala Ala Gly Ile  
425         1                 5                 10  
428 (2) INFORMATION FOR SEQ ID NO: 16:  
430         (i) SEQUENCE CHARACTERISTICS:

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/09/898,860

DATE: 12/04/2001  
TIME: 10:43:22

Input Set : N:\Crf3\RULE60\09898860.raw  
Output Set: N:\CRF3\12042001\I898860.raw

L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:2773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122  
L:2796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:123  
L:2813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124  
L:2830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125